## ABSTRACT OF THE DISCLOSURE

A load handling systems for manipulating a load onto and off of a vehicle, which moves the load about three axes of rotation during the loading and unloading process and which does not reversibly engage the vehicle. An embodiment is a load handling system that includes three support arms pivotally attached and serially disposed, the support arms being controllably rotated relative to one another by lift mechanisms in a manner that moves a connector for connecting the load handling system to the load about three axes of rotation as it moves from a transit position to a load-disengaging position.